

Continuous real-time data protection and disaster recovery

With the HP BladeSystem and VMware ESX Server solution

HP BladeSystem Solution Block



You've estimated that up to half of your data protection and disaster recovery budget is wasted—but your real challenge is figuring out which half. We can help.

There are probably as many approaches to data protection and disaster recovery as there are types of disasters that might befall your datacenter. Figuring out which approach is best for your datacenter—from a technical, operational and financial outlook—is enough to keep a responsible manager like you up at night.

Software glitches, hardware failures, human error—even site-wide outages—threaten your datacenter. And don't forget about those governmental compliance requirements. Whatever reasons drive you to protect your data, HP and VMware have a proven, flexible solution that prepares your data to survive and recover from almost any calamity.

Building a solid foundation

Building the best protection for data begins with a solid foundation, like HP BladeSystem. HP BladeSystem integrates the essential elements of the datacenter—computing, storage, network, power and management—into a modular, self-optimizing unit. These modules are virtualized to pool and share all resources and connections—increasing utilization, lowering costs and providing the flexibility and control to quickly meet changing conditions and requirements.

VMware ESX Server extends the benefits of HP BladeSystem by providing a dynamic, scalable virtual machine environment to host replicas of the physical servers you choose to protect. This means that on one or more HP BladeSystem server blades—located in the same enclosure, the same datacenter or on opposite sides of the globe—multiple unmodified Microsoft® Windows® operating systems and their applications run independently in virtual machines

while sharing physical resources. This method protects your applications, increases hardware utilization, decreases the datacenter “footprint”, and eases management tasks.

And while we're on the subject of management, HP Systems Insight Manager (SIM) and HP ProLiant Essentials Virtual Machine Management pack (VMM) provide an integrated management environment to not only replicate the servers to the VMware virtual machines, but also to allow you to manage the virtual machines—no matter where they are located—from a single SIM console just like any physical HP server.

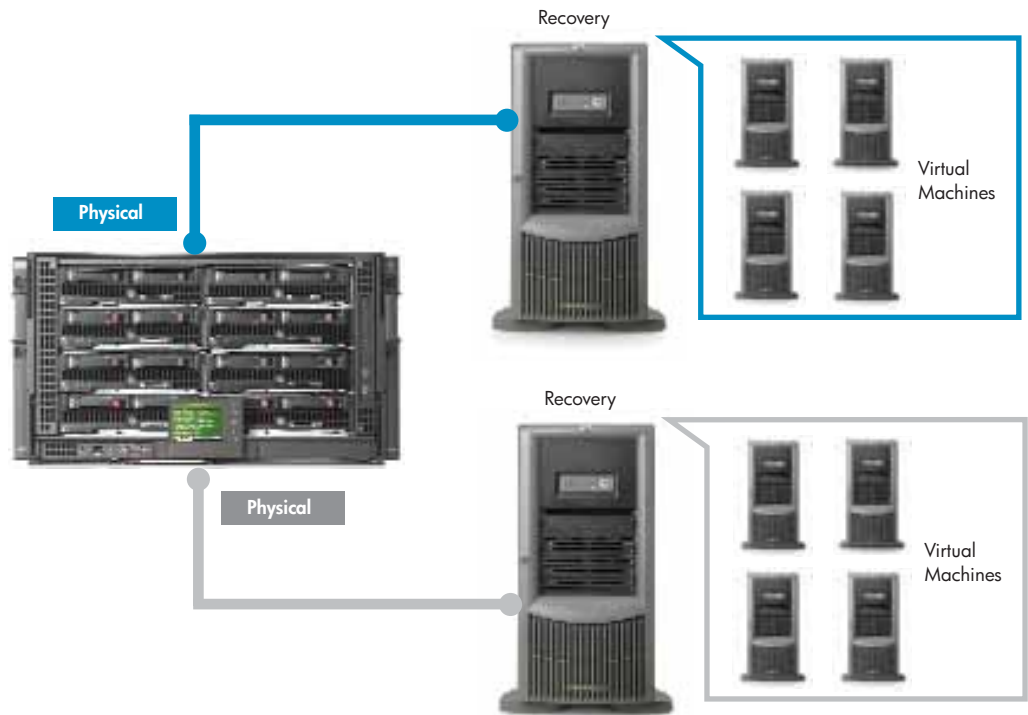
Of course, replicated operating systems and applications are just the basics of protection. The data so critical to your business needs to be synchronized between the physical and the virtual—and kept that way. With HP StorageWorks Storage Mirroring for Virtual Machines, continuous real-time replication—at the byte-level—keeps data up-to-date, and the included automatic failover capabilities allow application availability, timely backup and a clear path to disaster recovery.

The choice is easier than ever

Deciding which approach to data protection and disaster recovery best fits your requirements has never been easier. HP and VMware have taken out the guess work with a proven, scalable solution that offers continuous, real-time data replication, a choice of Intel® Xeon™ or AMD® Opteron processors, flexible storage options, a clear path for growth, and the comfort of knowing that, unlike others, half of your data protection and disaster recovery is not being wasted.

HP BladeSystem solution

- HP BladeSystem Solution Blocks – proven application solution definitions that cut the time and effort needed to create, combine and upgrade business solutions on an HP BladeSystem platform
- Accommodating future growth – through seamless upgrade to 16-slot HP BladeSystem c7000 enclosure; your investment remains protected
- Efficient shared storage – serves file/print and iSCSI-based application data
- Low-cost, standards-based switch with layer 3 routing, filtering and quality of service (QoS) queuing via the HP GbE2c Layer 2/3 Ethernet Blade Switch
- Management – HP System Center Essentials, HP Insight Manager



Bill of materials

Source (Physical)

1 HP BladeSystem c3000 enclosure
8 HP ProLiant BL46xc Server Blades
1 HP GbE2c Layer 2/3 Ethernet Blade Switch or 1 HP Virtual Connect module
HP BladeSystem Installation and Start-up Service

Target (Virtual)

New or repurposed servers may be used with these guidelines:

4 – 8 VMware ESX Virtual machines per processor core
2 – 4GB RAM per processor core
6 – 8 NIC ports per server
VMware ESX Server

Control for speeding deployment and monitoring of your IT infrastructure.

You will use Rapid Deployment Pack to auto-provision servers running VMware ESX Server within your environment. Through increased system performance, accessibility and availability, you will enjoy increased product levels coupled with reduced operating costs.

Your next step

You have the vision for a high-performance, low-cost data protection and disaster recovery solution for your company—and HP and VMware share that vision. Enjoy the comfort of knowing that your data protection and disaster recovery budget is being protected. Take the next step toward realizing your goal. Call your local authorized HP and VMware reseller today. These HP and VMware experts have just what it takes to accelerate your business growth and lower your operating costs while mitigating solution design and deployment risks.

The bottom line is value

Choosing the right data protection and disaster recovery solution has never been easier. HP and VMware have made the decision simple by providing a proven, scalable solution that offers continuous real-time data replication. You will discover the power of HP Insight

For more information, visit www.hp.com/go/ bladesolutions

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